PRIMERGY RX300 S7

System configurator and order-information guide

June 2012

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Change report

PRIMERGY Server

Instructions

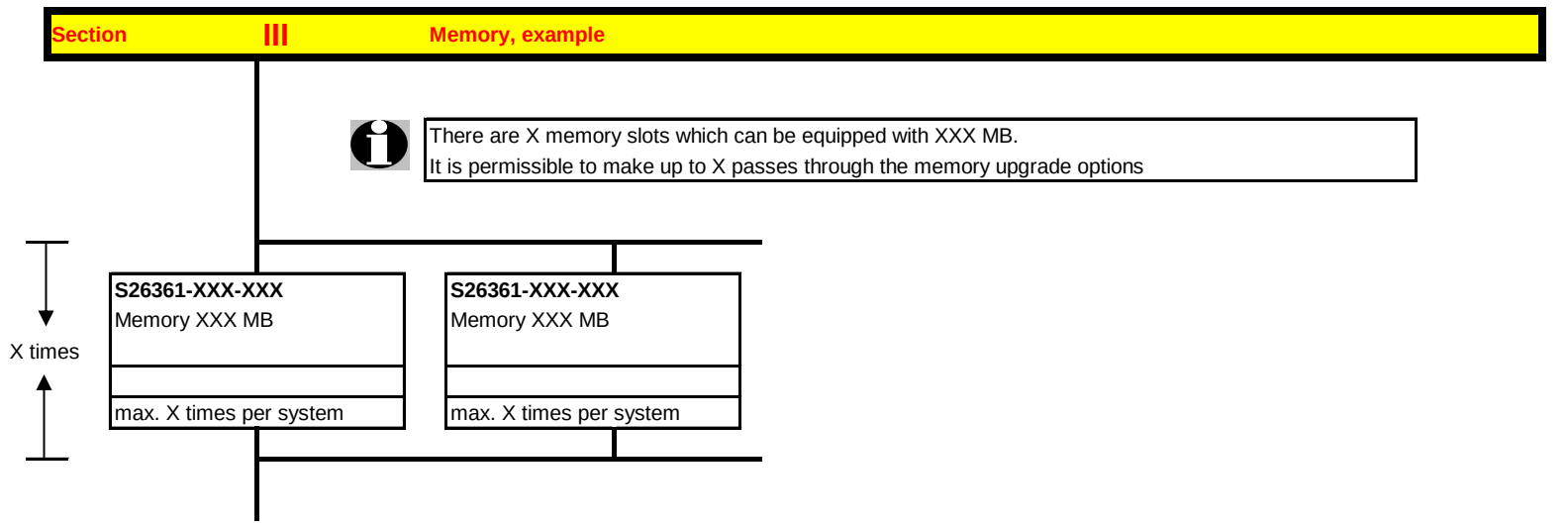
This document contains basic product and configuration information that will enable you to configure your system via PC-/System-Architect.

Only these tools will ensure a fast and proper configuration of your PRIMERGY server or your complete PRIMERGY Rack system.

You can configure your individual PRIMERGY server in order to adjust your specific requirements.

The System configurator is divided into several chapters that are identical to the current price list and PC-/SystemArchitect.

Please follow the lines. If there is a junction, you can choose which way or component you would like to take. Go through the configurator by following the lines from the top to the bottom.


Section III Memory, example
There are X memory slots which can be equipped with XXX MB.
It is permissible to make up to X passes through the memory upgrade options
X times
S26361-XXX-XXX
Memory XXX MB
max. X times per system
S26361-XXX-XXX
Memory XXX MB
max. X times per system

In one chapter you can only select as many components (here 4x) as the arrow indicates.

Please note that there are information symbols which indicate necessary information.

For further information see:

http://ts.fujitsu.com/products/standard_servers/inc (internet)

https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/current/Pages/default.aspx (extranet)

Configuration diagram PRIMERGY RX300 S7

System unit (I)

with up to 6x 3.5" Hard disk drives

Motherboard

Memory CPU1

(Channel A + B + C)

Bank 1 (4 Modules)
Bank 2 (4 Modules)
Bank 3 (4 Modules)

Memory CPU2

(Channel D + E + F)

Bank 1 (4 Modules)
Bank 2 (4 Modules)
Bank 3 (4 Modules)

Memory (III)

Xeon DP

Xeon DP

Processor (II)

front side

Bay for LocalView LCD LSD

Air channel

2 USB
VGA, LAN
Frontpanel

Bay for 5,25"x 0,5" SATA-BR **or** DVD-ROM/RW

Accessible drives (V)

Needs space for 2 hard disk drives!

3.5"x1,6"

Backup drive option

rear side

1. PSU | 2. PSU

Redundant power supply option

Fan 1 - Fan 5

Redundant Fans are standard!

Modular RAID Support	**Raid Card for IME, Raid 0 / 1E**
	Raid Card for Raid 5

Low-profile extension slots for:
SCSI Controller for backup(VII)
SAS Disk Array (VIII)
Communication/Network (IX)
Miscellaneous (X)

Slot 6 PCIe-3 x16, 390mm @ CPU2

Slot 5 PCIe-3 x16, 390mm @ CPU2

Slot 4 PCIe-3 x8, max. 390mm @ CPU1
Possibility to install PCIe x16 cards

Slot 3 PCIe-3 x8, max. 390mm @ CPU1

Slot 2 PCIe-3 x8, max. 312mm @ CPU1

Slot 1 PCIe-3 x8, max. 168mm @ CPU1 white colored
Dedicated for modular on-board LAN-Controller

Slot 7 PCIe-3 x8, max. 168mm @ CPU1
Internal slot for modular RAID-Controller

Hard disk drives (VI)

3.5" SAS/SATA

3.5"x1" SAS or SATA
3.5"x1" SAS or SATA
3.5"x1" SAS or SATA
3.5"x1" SAS or SATA
3.5"x1" SAS or SATA
3.5"x1" SAS or SATA

Key:

Included in basic unit

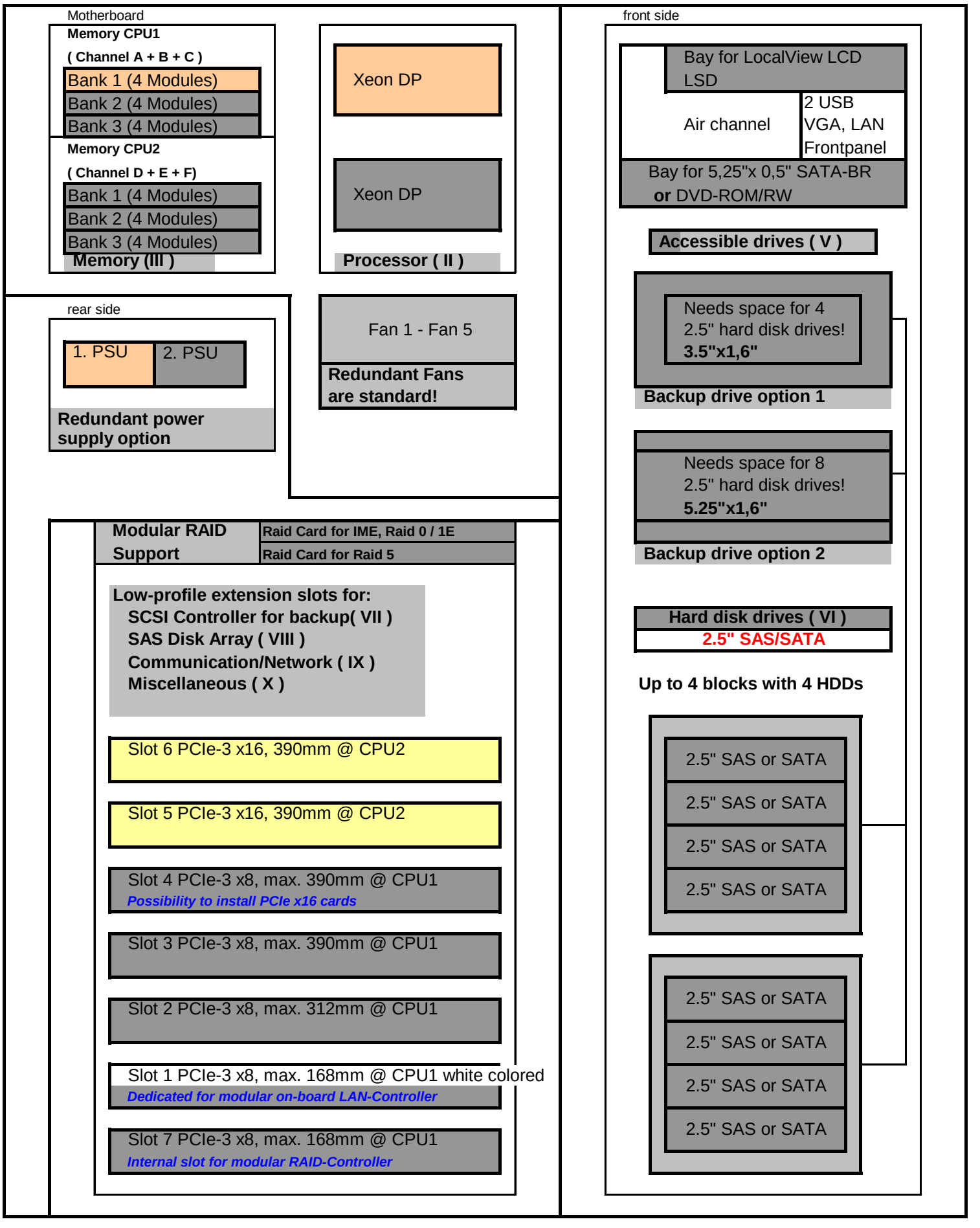
Option

One **CPU**, one **memory** per CPU and one **PSU** has to be selected for an orderable basic unit.

Configuration diagram PRIMERGY RX300 S7

System unit (I)

with up to 4, 8, 12 or 16x 2.5" Hard disk drives


Motherboard
Memory CPU1
(Channel A + B + C)
Bank 1 (4 Modules)
Bank 2 (4 Modules)
Bank 3 (4 Modules)
Memory CPU2
(Channel D + E + F)
Bank 1 (4 Modules)
Bank 2 (4 Modules)
Bank 3 (4 Modules)
Memory (III)
Xeon DP
Xeon DP
Processor (II)
front side
Bay for LocalView LCD
LSD
Air channel
2 USB
VGA, LAN
Frontpanel
Bay for 5,25"x 0,5" SATA-BR
or DVD-ROM/RW
Accessible drives (V)
rear side
1. PSU
2. PSU
Redundant power supply option
Fan 1 - Fan 5
Redundant Fans are standard!
Needs space for 4 2.5" hard disk drives!
3.5"x1,6"
Backup drive option 1
Needs space for 8 2.5" hard disk drives!
5.25"x1,6"
Backup drive option 2
Modular RAID Support
Raid Card for IME, Raid 0 / 1E
Raid Card for Raid 5
Low-profile extension slots for:
SCSI Controller for backup(VII)
SAS Disk Array (VIII)
Communication/Network (IX)
Miscellaneous (X)
Slot 6 PCIe-3 x16, 390mm @ CPU2
Slot 5 PCIe-3 x16, 390mm @ CPU2
Slot 4 PCIe-3 x8, max. 390mm @ CPU1
Possibility to install PCIe x16 cards
Slot 3 PCIe-3 x8, max. 390mm @ CPU1
Slot 2 PCIe-3 x8, max. 312mm @ CPU1
Slot 1 PCIe-3 x8, max. 168mm @ CPU1 white colored
Dedicated for modular on-board LAN-Controller
Slot 7 PCIe-3 x8, max. 168mm @ CPU1
Internal slot for modular RAID-Controller
Hard disk drives (VI)
2.5" SAS/SATA
Up to 4 blocks with 4 HDDs
2.5" SAS or SATA
2.5" SAS or SATA
2.5" SAS or SATA
2.5" SAS or SATA
2.5" SAS or SATA
2.5" SAS or SATA
2.5" SAS or SATA
2.5" SAS or SATA

Key:

Included in basic unit Option

One **CPU**, one **memory** per CPU and one **PSU** has to be selected for an orderable basic unit.

Start PRIMERGY RX300 S7

SW Configurator 32 bit

with OEM-Software
for PRIMERGY Server

without OEM-Software
for PRIMERGY Server

OEM- SW is bound to HW and is not allowed to be ordered separately.
Exception: VMware SW

VMware-Software
- VirtualCenter Management Server for any server released for Windows Server 2003
- Virtual Infrastructure 3 for PRIMERGY > except all mono PRIMERGY systems
- ESX2 for PRIMERGY RX/TX300S2, RX/TX600S3, BX620S2, BX630 Dual/Quad, BX630 8-way

For all SW products please refer to the corresponding software configurator accessible via the Extranet under Configuration & Tools, -All configurations, -Software, URL see below.

Linux - Software **)
- Open Enterprise Server ***)
- SuSE Linux ES (OEM): LO
- Red Hat EL (OEM): LO

Microsoft - Windows Server 2008 Server Licenses
- Windows Server 2008 Enterprise
- Windows Server 2008 Standard
- Windows Server 2008 Foundation
- Windows Web Server 2008

PRIMECLUSTER *)
- Clustering
- Load Balancing

Microsoft - Windows Server 2008 Client Access Licenses
- Windows Server 2008 Device CAL
- Windows Server 2008 User CAL
- Windows Server 2008 Remote Desktop Services Device CAL
- Windows Server 2008 Remote Desktop Services User CAL

SCO - Software: **)
- SCO OpenServer (only 1- and 2-way Tower servers)
- SCO UnixWare (only 1-, 2, and 4-way Tower and Rack servers)

x10sure *)
x10sure Control Nodes and Compute Nodes
Windows Server 2003 Compute Nodes
for PRIMERGY BX600, RX/TX

MultiPath, Duplex Data Manager (DDM) W2K; W2K3 Linux (W-DDM)
for PRIMERGY except all mono PY systems

Details eg. version numbers are published on the page referred to

Manageability Software: V)**
- iRMC advanced Pack
- RemoteView Software
- RemoteView Service Board
- RemoteView Diagnosis
- RemoteDeploy

***) Pay attention to the x10sure release and ordering information in the Extranet under**
https://ts.fujitsu.com/x10sure

***) Pay attention to the PRIMECLUSTER release and ordering information in the Extranet under**
https://partners.ts.fujitsu.com/com/products/software/cluster%20technology/primecluster/Pages/default.aspx

Backup-Software / Application-Software: U
- ARCserve
- openSM2

****) Pay attention to release and order information in PRINCE -> Operating System**
https://partners.ts.fujitsu.com/com/products/servers/primergy/Pages/default.aspx

*****) Supply over distribution or procurement from FSC VP BC Software**

You'll find single software configurators and release lists (OS-matrix / system management / security) under following addresses:

for internal users: http://sp.ts.fujitsu.com/dmsp/docs/osrel.xlsx
for partners: https://partners.ts.fujitsu.com/com/products/servers/primergy/Pages/default.aspx

Continue with PRIMERGY HW configurator

Start PRIMERGY RX300 S7

SW Configurator 64 bit (EM64T / IA64)

with OEM-Software
for PRIMERGY Server

without OEM-Software
for PRIMERGY Server

OEM- SW is bound to HW and is not allowed to be ordered separately.
Exceptions: VMware SW, Citrix XenServer

For all SW products please refer to the corresponding software configurator accessible via the Extranet under "Configuration & Tools, -All configurations, -Software, URL see below.

VMware-Software
- VirtualCenter Management Server for any server released for Windows Server 2003
- Virtual Infrastructure 3 for PRIMERGY > except all mono PRIMERGY systems
- ESX2 for PRIMERGY RX/TX300S2, RX/TX600S3, BX620S2, BX630 Dual/Quad, BX630 8-way

Citrix XenServer / Essentials for XenServer
- XenCenter Management Server for any server released for Windows 2000/XP/Vista and Server 2003/2008
- XenServer and Essentials for XenServer released for RX200S5, RX300S4/S5, RX600S4, BX620S4/S5, BX920S1

Microsoft Hyper-V Server and System Center
- Microsoft System Center Virtual Machine Manager Workgroup Edition for any server released for Windows Server 2008 R2
- Microsoft System Center Essentials Management Suite for any server released for Windows Server 2008 SP2
- Microsoft Hyper-V Server 2008 R2

Microsoft - Windows Server 2008 R2 Server Licenses
- Windows HPC Server 2008 R2 Suite
- Windows Server 2008 R2 Datacenter
- Windows Server 2008 R2 Enterprise
- Windows Server 2008 R2 Standard
- Windows Web Server 2008 R2

Microsoft - Windows Server 2008 Server Licenses
- Windows Server 2008 Datacenter
- Windows Server 2008 Enterprise
- Windows Server 2008 Standard
- Windows Web Server 2008

Microsoft - Windows Server 2008 Client Access Licenses
- Windows Server 2008 Device CAL
- Windows Server 2008 User CAL
- Windows Server 2008 Remote Desktop Services Device CAL
- Windows Server 2008 Remote Desktop Services User CAL

only EM64T

Linux - Software *) **)
Open Enterprise Server ***)
- SuSE Linux ES (OEM): LO
- Red Hat EL (OEM): LO

PRIMECLUSTER *)
- Clustering
- Load Balancing

QuickTransit (QT)
only EM64T Transition Solaris Apps. to x86-64 PY with Linux

only EM64T

MultiPath, Duplex Data Manager (DDM) Windows, Linux (W-DDM)

Details eg. version numbers are published on the page referred to

only EM64T

Manageability Software: V)**
- iRMC advanced Pack
- RemoteView Software
- RemoteView Service Board
- RemoteView Diagnosis
- RemoteDeploy

***) Pay attention to the PRIMECLUSTER release and ordering information in the Extranet under**
https://partners.ts.fujitsu.com/com/products/software/cluster%20technology/primecluster/Pages/default.aspx

****) Pay attention to release and order information in PRINCE -> Operating System**
https://partners.ts.fujitsu.com/com/products/servers/primergy/Pages/default.aspx

*****) Supply over distribution or procurement from FSC VP BC Software**

You'll find single software configurators and release lists (OS-matrix / system management / security) under following addresses:

for internal users: http://sp.ts.fujitsu.com/dmsp/docs/osrel.xlsx
for partners: https://partners.ts.fujitsu.com/com/products/servers/primergy/Pages/default.aspx

Continue with PRIMERGY HW configurator

Start PRIMERGY RX300 S7

Section | Basic unit

System unit consisting of:
*** 2U Housing without power supply modules**
*** Basic units with:**
- 2 Hot-Plug Power Supply Bays
- 5 Fans (full redundancy)
*** SAS Backplane for 6x 3.5" HD or SAS Backplanes for 4, 8, 12 or 16x 2.5" HD with cable connection to on-board or modular RAID Controller**

*** Drives/Bays**
- 6 bays 1" for hot plug 3.5" HD (1" high) or 4, 8, 12 or 16 bays for hot plug 2.5" HD
- 1 bay for 3.5" and 1.6" high Backup device, consumes 2 bays for 3.5" HD for basic unit 6x 3.5" HD not possible for basic unit with 12 or 16 x 2,5" HD
- 1 bay for 5.25" and 1.6" high Backup device, not possible for basic unit 6x 3.5" HD for basic unit with 12 or 16 x 2,5" HD
- 1 bay SATA-CD- or DVD-ROM 0,5" height (option)
- 1 bay for opt. LocalView LC-Display

*** Integrated ServerView Diagnostics Technology (Diagnosis LED`s) for indication of internal failed components**

Systemboard D2939 with:
*** Up to two Xeon 4C, 6C & 8C CPU`s (Socket-R) with 2 serial QPI links (Quick Path Interconnect) and four memory channels per CPU First CPU has to be selected for an orderable basic unit,**
*** Chipset Intel® C600 Series (codenamed Patsburg)**

*** 7 PCI slots:**
- 2x PCIe-3 x16 (both slots are connected to CPU 2 and are useable with configured 2nd CPU only!)
- 4x PCIe-3 x8 (one notched to install x16 cards)
- 1x PCIe-3 x8 (for internal modular RAID controller only)

*** 24 memory slots for max. 768GB RAM DDR3 available**
- Memory is divided into 12 DIMMs per CPU (4 channels with 3 slots per channel)
Possible max. configurations are:
24x 32GB LRDIMM (quad rank modules) = 768GB
24x 16GB RDIMM (dual rank modules) = 384GB
16x 8GB UDIMM (dual rank modules) = 128GB
First Memory (one module) has to be selected for an orderable basic unit per CPU
- Memory upgrade is possible module wise
- Memory mirrroring is supported with 2 identical modules in channel A+B CPU 1 or D+E CPU 2
- Hot Spare Memory is supported with 3 identical modules in channel A+B+C CPU 1 or D+E+F CPU 2
- SDDC (Chipkill) is supported for memory modules,

*** Dual Port 10/100/1000 x4 PCI Express* Gigabit Ethernet Intel LAN controller Powerville on-board**
*** iRMC S3 (integrated Remote Management Controller) on-board server management controller with dedicated 10/100/1000 Service LAN-port and integrated graphics controller. The Service LAN-port can be switched alternatively on standard Gbit LAN port 1**

*** Graphics Controller integrated in iRMC S3 (integrated Remote Management Controller): 1600x1200x16bpp 60Hz, 1280x1024x16bpp 60Hz, 1024x768x32bpp 75Hz, 800x600x32bpp 85Hz, 640x480x32bpp 85Hz (1280x1024x24bpp 60Hz only possible if local monitor or remote video redirection is off)**

Interfaces at the rear:
* 1x RS-232-C (serial, 9 pins) (usable for BMC or OS or shared)
* 1x VGA (15 pins)
* 4x USB **2.0** (UHCI) with **480MBit/s,** no USB wakeup
* 2x LAN RJ45, 1x Service-LAN RJ45

Interfaces on the front:
* 2x USB **2.0** (UHCI) with **480MBit/s,** no USB wakeup
* 1x VGA (15 pins) as an option
* 1x Service-LAN RJ45 as an option

Interfaces internal:
* 1x released internal USB Interfaces for backup devices,
* 1x USB 2.0 (UHCI) with 480MBit/s for dongle funcionality (uSSD memory), no USB wakeup
* 1x SATA interface for DVD (only usable with 4x 2.5" HDD + DVD Option)
* 4x SATA/SAS interface for 4 SATA/SAS HD`s or SAS Backup device
* 2x USB 2.0 ports for internal USB redirection connected to BMC

Software:
*** ServerView Suite Software package incl. ServerStart, ServerBooks, Management Software and Updates**
*** Documentation engl. (multilingual on CD)**

A

A

Cables included in basic unit

Connections	Cable	PRIMERGY RX300 S7
1. SATA DVD		
2. SAS cables to HDDs		
3. 1x cable for SAS signaling		

SAS
SATA

Note: Rack Mounting kit and Power Cord for RX300S7 is not included in the basic unit and has to be configured separately

Rack version for 19" racks with No PSU included in Base Unit	
Basic unit is without CPU and Memory For an orderable basic unit one CPU = first CPU and one memory = first memory has to be selected	
Basic unit with **6x 3.5" HDD bays fixed**	**S26361-K1373-V101**
Basic unit with **2.5" HDD bays expandable**	**S26361-K1373-V401**
Basic unit with **8x 2.5" HDD bays fixed**	**S26361-K1373-V201**
Basic unit with **12x 2.5" HDD bays fixed**	**S26361-K1373-V301**

Basic unit with 2.5" HDD bays is modular expandable with various modules for backup devices integration or up to 16x 2.5" HDDs.
Details and pictures see Section Va:
Possible configuration options for basic units

Full redundancy cannot be guaranteed for a max. config. with e.g. two 135W CPUs with 450W PSUs.
In this case SysArch will generate a warning and Power Safeguard will throttle CPUs in case of a PSU failure.
So, power consumption will be limited to 450W.

as soon as available (June 2012)

S26113-F575-E10
450W PSU module platinum
1st or 2nd PSU for redundancy
94% efficiency (platinum)
uses hot plug PSU slot
min. 1 / max. 2x per system

S26113-F574-E10
800W PSU module platinum
1st or 2nd PSU for redundancy
94% efficiency (platinum)
uses hot plug PSU slot
min. 1 / max. 2x per system

S26113-F609-E10
800W PSU module -48V DC gold
1st or 2nd PSU for redundancy
92% efficiency (gold)
uses hot plug PSU slot
min. 1 / max. 2x per system

S26113-F574-E99 *
Power Supply Dummy
must be ordered if 1x PSU only
occupies one bay for hot plug power supply
max. 1x per system

For later redundancy upgrade the following kit is available:	
One 450W power supply module hot plug no power cable included!!!	**S26113-F575-L10**
One 800W power supply module hot plug no power cable included!!!	**S26113-F574-L10**
One 800W -48V DC PSU hot plug no power cable included!!!	**S26113-F609-L10**

Please order appropriate power cord additionally:	
Powercord for rack, 4m, grey, IEC320 C13->C14 connector	**T26139-Y1968-L10**
Power Cord USA / Canada, 1.8m, grey	**T26139-Y1742-L10**
Power Cord -48V DC, 4m, black	**T26139-Y4024-L10**

***For order completeness only**
Not shown in system architect
Version > V9.2

S26361-F3552-E1
TPM Module
Trusted Platform Module on Motherboard
Use according to import restrictions
max. 1x per system

Be aware of import restrictions!
Loose delivery for later integration possible for customer.

S26361-F3552-L1
TPM Module add-on kit
for later integration (loose delivery)
Trusted Platform Module on Motherboard
Use according to import restrictions
max. 1x per system

B

B
PRIMECENTER Rack

S26361-F2735-E175
RMK-F1_DI_CMA_QRL_LV
telescopic drop-in rail, full extr.
1-hand-mounting
RMK - 1 pair consisting of
- vario carrier length variable
with quick release lever support
- telescopic drop-in rails
with CMA adapter
1x per system

S26361-F2735-E111
No Rackmount-Kit option
Only for loose deliveries
No mounting in racks possible
max. 1x per system

C

S26361-F4530-E11
Mounting 1U server in
asymmetrical racks
with 1U support bracket

S26361-F4530-E10
Mounting in
symmetrical racks
(no support bracket needed)

S26361-F2735-E71
Lateral cable management
for 2U servers or higher
- for asymmetrical racks
PRIMECENTER S2 or M1
- 1 bracket PC Rack asym.
1x per system

S26361-F2735-E82
2U cable management arm (CMA)
for 2U Server
- for symmetrical racks
M1 or 3rd party racks
Fujitsu racks
1x per system

SNP:SY-F1647E301-P
Installation ex works for one
server or subsystem.
Hereby the rack will be delivered
completely pre-mounted and
all wired connections are tested.
With PCR S2 12U, 24U, 38U and
PRC M1 16U, 24U, 42U:
Systems and components
will be delivered installed in the rack
With PCR S2 racks 46U:
Systems and components
will be delivered separately
To be ordered only together with
a PRIMECENTER rack
PCR S2 e.g. S26361-K826-V10x
new PCR M1 e.g. S26361-K827-Vxxx
refer PCR S2 or M1 rack configurator
max. 1x per System

C

S26361-F2735-L175
RMK-F1_DI_CMA_QRL_LV
for loose delivery

S26361-F2735-L10
Adapter angle PC/DC-Rack, till 50Kg
necessary for mounting RMKs in
asymmetrical racks

S26361-F2735-L7
Lateral cable management
can only be mounted
in asymmetrical PRIMECENTER
S2 or new M1 racks in 1U above RMK

Cable Management Arm (CMA) can
only be used for FTS RMKs with
CMA adapter

S26361-F2735-L82
Cable management arm for 2U Server
or higher for loose delivery
can only be mounted at RMK with
CMA adapter
for loose delivery

"Rack-mounting ex factory"
This service is to be ordered once
per installable server/storage
subsystem, in order to get the
server/storage subsystem
mounted into the racks.
In case of the 46 U PCR S2
this service has to be ordered,
to get the mounting kits and the
cables installed.

PRIMERGY Classic 19" rack is not supported

C

Section || Processor

There are 2 processor sockets available.
The first socket must always be equipped with the **first CPU** which can be selected via configurator
It is also possible to upgrade a dual-processor system later on with a **second CPU**
Both PCIe-3 x16 slots are connected to CPU 2 and are useable with configured 2nd CPU only!
Two processors with different clock frequencies are not possible
A multi-processor operating system is required for a dual-processor system.

Max. two CPU`s can be selected per basic unit	
One of following CPU´s has to be selected as first CPU for an orderable basic unit	
Optional second CPU has to be the same type like the first CPU	
Basic 4C CPU's - 1x 64-bit Intel Xeon (10MB Smart Cache) 1066 MHz DDR3 Bus; 6,40 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2603 4C/4T 1.80GHz 10MB 6.40GT/s 1066MHz 80W	**S26361-F3685-E180**
Xeon E5-2609 4C/4T 2.40GHz 10MB 6.40GT/s 1066MHz 80W	**S26361-F3685-E240**
Standard Turbo 6C CPU's - 1x 64-bit Intel Xeon (15MB Smart Cache); Hyper-Threading (HT); 1333 MHz DDR3 Bus; 7,20 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2620 6C/12T 2.00GHz 15MB 7.20GT/s 1333MHz 95W	**S26361-F3676-E200**
Xeon E5-2630 6C/12T 2.30GHz 15MB 7.20GT/s 1333MHz 95W	**S26361-F3676-E230**
Xeon E5-2640 6C/12T 2.50GHz 15MB 7.20GT/s 1333MHz 95W	**S26361-F3676-E250**
Advanced Turbo+ 8C CPU`s - 1x 64-bit Intel Xeon (20MB Smart Cache); Hyper-Threading (HT); 1600 MHz DDR3 Bus; 8,00 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2650 8C/16T 2.00GHz 20MB 8.00GT/s 1600MHz 95W	**S26361-F3686-E200**
Xeon E5-2660 8C/16T 2.20GHz 20MB 8.00GT/s 1600MHz 95W	**S26361-F3686-E220**
Xeon E5-2665 8C/16T 2.40GHz 20MB 8.00GT/s 1600MHz 115W	**S26361-F3686-E240**
Xeon E5-2670 8C/16T 2.60GHz 20MB 8.00GT/s 1600MHz 115W	**S26361-F3686-E260**
Xeon E5-2680 8C/16T 2.70GHz 20MB 8.00GT/s 1600MHz 130W	**S26361-F3686-E270**
Xeon E5-2690 8C/16T 2.90GHz 20MB 8.00GT/s 1600MHz 135W	**S26361-F3686-E290**
Frequency Optimized Turbo 2C, 4C & 6C CPU`s - 1x 64-bit Intel Xeon (5/10/15MB Smart Cache); Hyper-Threading (HT); 1600 MHz DDR3 Bus; 6,40/7,20 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2637 2C/4T 3.00GHz 5MB 6.40GT/s 1600MHz 80W	**S26361-F3687-E300**
Xeon E5-2643 4C/8T 3.3GHz 10MB 6.40GT/s 1600MHz 130W	**S26361-F3687-E330**
Xeon E5-2667 6C/12T 2.90GHz 15MB 7.20GT/s 1600MHz 130W	**S26361-F3687-E290**
Low Power 4C/6C/8C CPU's - 1x 64-bit Intel Xeon (15/20MB Smart Cache); Hyper-Threading (HT); 1333/1600 MHz DDR3 Bus; 7,20/8,00 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2630L 6C/12T 2.00GHz 15MB 7.20GT/s 1333MHz 60W	**S26361-F3688-E200**
Xeon E5-2650L 8C/16T 1.80GHz 20MB 8.00GT/s 1600MHz 70W	**S26361-F3688-E180**

On special release only

Note: Max. DDR3 Bus Speed depends on:

- **max. DDR3 Bus Speed from the CPU and**
- **max. DDR3 Memory Speed and**
- **max. memory modules on one memory channel**

D

D

Section IV Graphics

Graphics Controller integrated in iRMC S3 (integrated Remote Management Controller):
1600x1200x16bpp 60Hz, 1280x1024x16bpp 60Hz, 1024x768x32bpp 75Hz, 800x600x32bpp 85Hz, 640x480x32bpp 85Hz
(1280x1024x24bpp 60Hz only possible if local monitor or remote video redirection is off)

S26361-F2571-E26
Optional Front-VGA
for Onboard Controller only
consists of internal cable and
front VGA connector
max. 1x per system

The hight end optional NVIDIA NVS300 graphic card offers dual head operation and fully 3D video support.
The cables for either two times DVI-I or VGA (cable kit) connections are part of the delievery.
Remote Video direction via iRMC must be disabled.
This PCIe-x1 card can also be installed in any PCIe-x4, x8 or x16 slot.
Only one card per server is allowed.

S26361-F2748-E637
PY VGA LP card 256MB PCI-e x1
NVIDIA NVS300
512 MB PCIe-x1
Connectors: 1x LFH 59
cable kit for 2x DVI or 2x VGA
cable kits included
Dual head + professional 2-D + 3-D
supported for Windows OS
native driver support for Linux OS
low profile bracket
max. 1x per system

S26361-F2748-L637
PY VGA LP card 512MB PCI-e x1
for loose delivery

E

E

Section III Memory

- There are 12 memory slots per CPU for max.
384GB LRDIMM (12x 32GB 4R)
192GB RDIMM (12x 16GB 2R)
32GB UDIMM (8x 4GB)
=> max. 768GB for two CPU`s (384GB per CPU), using LRDIMM
- The memory area is divided into 4 channels per CPU with 3 slots per channel
- Slot 1 of each channel belongs to memory bank 1, the slot 2 belongs to memory bank 2, slot 3 belongs to memory bank 3

Registered, LR DIMMs and unbuffered memory modules can be selected
No mix of registered, load reduced and unbuffered modules allowed.
Memory can be operated at 1.5V or 1.35V, even if the modules are of low voltage type.
Memory operating voltage can be set within BIOS (**1.5V is default** setting for max. speed).
In a 2 DIMMs per channel configuration, following frequencies are supported:
- 1.5V - 1600MHz max (depending on CPU, special memory modules)
- 1.35V - 1333MHz max (depending on CPU)
In a 3 DIMMs per channel configuration, memory will operate at 1.5V only.
SDDC (Chipkill) is supported for registered / load redueced x4 organized memory modules only

1.) In the "Independent Channel Mode" is following configuration possible
Channels can be populated in any order in Independent Channel Mode. All four channels may be populated in any order and have no matching requirements. All channels must run at the same interface frequency but individual channels may run at different DIMM timings (RAS latency, CAS latency, and so forth)
No mix of registered, load reduced and unbuffered modules allowed.

2.) "Rank Sparing Mode" configuration
- Within a memory channel, one rank is a spare of the other ranks.
The Spare Rank is held in reserve and is not available as system memory
For the effective memory capacity, please refer to the spreadsheet below.
The BIOS is set to the rank sparing setting.
Minimum configuration is: 2x 1R, 2x 2R or 1x4R DDR3 module per channel
This mode is not supported by unbuffered memory modules

3.) "Performance Mode" configuration
- In this configuration, the memory module population ex factory is spread across all channels.
The BIOS is set to the max. performance for memory.
Minimum configuration is: 4x identical modules

4.) In the "Mirrored Channel Mode" is following configuration possible
- Each memory bank can optionally be equipped with 4x registered or load reduced or unbuffered DDR3 modules
In each memory bank channel A and B / C and D of CPU 1 or channel E and F / G and H of CPU 2 have to be equipped with identical modules for mirrored channel mode.
In channel B / D is always the mirrored memory of channel A / B of CPU 1
In channel F / H is always the mirrored memory of channel E / G of CPU 2
Minimum configuration is: 4x identical modules
This mode is not supported by unbuffered memory modules

F

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1x per CPU

S26361-F3694-E10 Independent Mode
Independent Channel Mode allows all channels to be populated in any order. No specific Memory RAS features are defined
Requires min 1 memory Module per CPU

S26361-F3694-E1 Rank Sparing Mode Installation
BIOS Setup factory preinstalled to this mode. One Rank is spare of other ranks on the same channel. Spare Rank is not shown in System Memory.
For effective capacity within a channel, please have a look below.
Supported for RDIMM / LRDIMM only.
Requires min 2x 1R/2R or 1x 4R modules per CPU

S26361-F3694-E2 Performance Mode Installation
BIOS Setup factory preinstalled for max. Performance, LV memory might be set to 1.5V operation. Four identical memory modules will be equipped in one memory bank to achieve highest memory performance. All four modules are active and full capacity can be used.
Multiple of 4 identical modules to be configured per CPU

S26361-F3694-E3 Mirrored Channel Mode Installation **as soon as available**
BIOS Setup factory preinstalled to this mode. Four identical memory modules are always equipped in one memory bank to use the Mirrored channel Mode. Only two modules contain active data, the remain two modules contain mirrored data
Supported for RDIMM / LRDIMM only.
Multiple of 4 identical modules to be configured per CPU

Effective Memory capacity / Rank Sparing Mode, 1 Channel populated

	UDIMM		RDIMM			LRDIMM	
	2GB 1R	2GB 2R	4GB 1R	8GB 2R	16GB 2R	16GB 4R	32GB 4R
1DPC	na	na	na	na	na	12GB	24GB
2DPC	na	na	4GB	12GB	24GB	28GB	56GB
3DPC	na	na	8GB	20GB	40GB	40GB	80GB

Minimum one memory module or order code per CPU = first memory

8/12x per CPU, max. 2/3 modules per channel

Unbuffered Memory (UDIMM) no SDDC (chipkill) support
- one DDR3 unbuffered ECC mem. Module, 1.35V
Choose up to 8 order codes per CPU

2GB (1x2GB) 1Rx8 L DDR3-1600 U ECC	S26361-F3694-E513
4GB (1x4GB) 2Rx8 L DDR3-1600 U ECC	S26361-F3694-E514

Registered Memory (RDIMM) no SDDC (chipkill) support
- one DDR3 registered ECC mem. Module, 1.35V
No mix with any other types of memory modules possible
Choose up to 12x for 1R/2R or 8x for 4R per CPU
For performance reasons, we do not recommend to configure more than 8 DIMMs per CPU

4GB (1x4GB) 2Rx8 L DDR3-1600 R ECC	S26361-F3695-E514

Registered Memory (RDIMM) with SDDC (chipkill) support
- one DDR3 registered ECC mem. Module, 1.35V
1333MHz supported with up to 2DPC (8 modules/CPU)
Choose up to 12 order codes per CPU

4GB (1x4GB) 1Rx4 L DDR3-1333 R ECC	S26361-F3696-E514	new due to supply
8GB (1x8GB) 2Rx4 L DDR3-1333 R ECC	S26361-F3696-E515	new due to supply

Registered Memory (RDIMM) with SDDC (chipkill) support
- one DDR3 registered ECC mem. Module, 1.35V
1600MHz supported with up to 2DPC (8 modules/CPU)
at 1.5V
Choose up to 12 order codes per CPU

4GB (1x4GB) 1Rx4 L DDR3-1600 R ECC	S26361-F3697-E514	
8GB (1x8GB) 2Rx4 L DDR3-1600 R ECC	S26361-F3697-E515	
16GB (1x16GB) 2Rx4 L DDR3-1600 R ECC	S26361-F3697-E516	

Load Reduced Memory (LRDIMM) with SDDC (chipkill) support
- one DDR3 load reduced ECC mem. Module, 1.35V
Choose up to 12 order codes per CPU

16GB (1x16GB) 4Rx4 L DDR3-1333 LR ECC	S26361-F3698-E516	as soon as available
32GB (1x32GB) 4Rx4 L DDR3-1333 LR ECC	S26361-F3698-E517	as soon as available

Note 1.)
Max. DDR3 memory speed depends on the memory configuration (No of mem modules per channe) as well as on the CPU type.
The memory channel with the lowest speed defines the speed of all CPU channels in the system, also for the channels of the second CPU if configured.
For real memory speed (depending on memory type / population), please check the spreadsheet "Memory speed" below

Mix of memory modules is only possible within the same group

G

Memory Configuration PRIMERGY RX300 S7

Each CPU offers 12 **Slots** for DDR3 Memory Modules organised in **3 Banks and 4 Channels.**
If you need more than 12 Slots you have to configure the 2nd CPU.
Depending on the amount of memory configured you can decide between 4 basic modes of operation (see explanation below).

There are 3 different kinds of DDR3 Memory Modules available: UDIMM / RDIMM and LRDIMM
UDIMM / RDIMM / LRDIMM offer different functionality. Mix of UDIMM / RDIMM / LRDIMM is not alloved.

If 1.5V and 1.35V DIMMs are mixed, the DIMMs will run at 1.5V

Mode	Configuration	UDIMM	RDIMM	RDIMM / LRDIMM	Application
		x8	x8	x4	
SDDC (chipkill) support	any	no	no	yes	detect multi-bit errors
Independant Channel Mode	1, 2 or 3 Modules per Bank	yes	yes	yes	offers max. flexibility, upgradeability, capacity use UDIMM modules for lowest cost
Mirrored Channel Mode *)	4 identical Modules / Bank	no	no	yes	offers maximum security
Performance Mode	4 identical Modules / Bank	yes	yes	yes	offers maximum performance and capacity
Rank Sparing Mode *)	min. 2 Ranks / Channel	no	no	yes	balances security and capacity

*) For the delivery ex works the system will be prepared with dedicated BIOS setting.

Capacity	Configuration	UDIMM	RDIMM	LRDIMM	Notes
Min. Memory per CPU	1 Module / CPU	1x2GB	1x4GB	1x 16GB	with one CPU
Max. Memory per CPU	8/12 Modules / CPU	8x4GB	12x16GB	12x 32GB	with one CPU
Max. Memory per System	16/24 Modules / System	64GB	192GB	768GB	if second CPU is configured

Memory-Speed:
Max. DDR3 memory speed depends on the memory configuration on one memory channel and the speed of the CPU
The memory channel with the lowest speed defines the speed of all CPU channels in the system

Mem. Speed provided by CPU	Real maximum memory-bus speed depending on CPU type, memory configuration (DPC) and voltage setting (BIOS)																	
	UDIMM 1600MHz						RDIMM 1600MHz						LRDIMM 1333MHz					
Voltage setting (BIOS)	1.5V [default]			1.35V			1.5V [default]			1.35V			1.5V [default]			1.35V		
	1 DPC	2 DPC	3 DPC	1 DPC	2 DPC	3 DPC	1 DPC	2 DPC	3 DPC	1 DPC	2 DPC	3 DPC	1 DPC	2 DPC	3 DPC	1 DPC	2 DPC	3 DPC
CPU with 1600MHz DDR3 Bus	1333 / 1600	1333	- / -	1066 / 1333	1066	- / -	1600	1600	1066	1333	1333	- / -	1333	1333	1066	1066	1066	- / -
CPU with 1333MHz DDR3 Bus	1333	1333	-	1066	1066	-	1333	1333	1066	1333	1333	-	1333	1333	1066	1066	1066	-
CPU with 1066MHz DDR3 Bus	1066	1066	-	1066	1066	-	1066	1066	1066	1066	1066	-	1066	1066	1066	1066	1066	-

on special release
as soon as available

1R - Single Rank
2R - Dual Rank
4R - Quad Rank

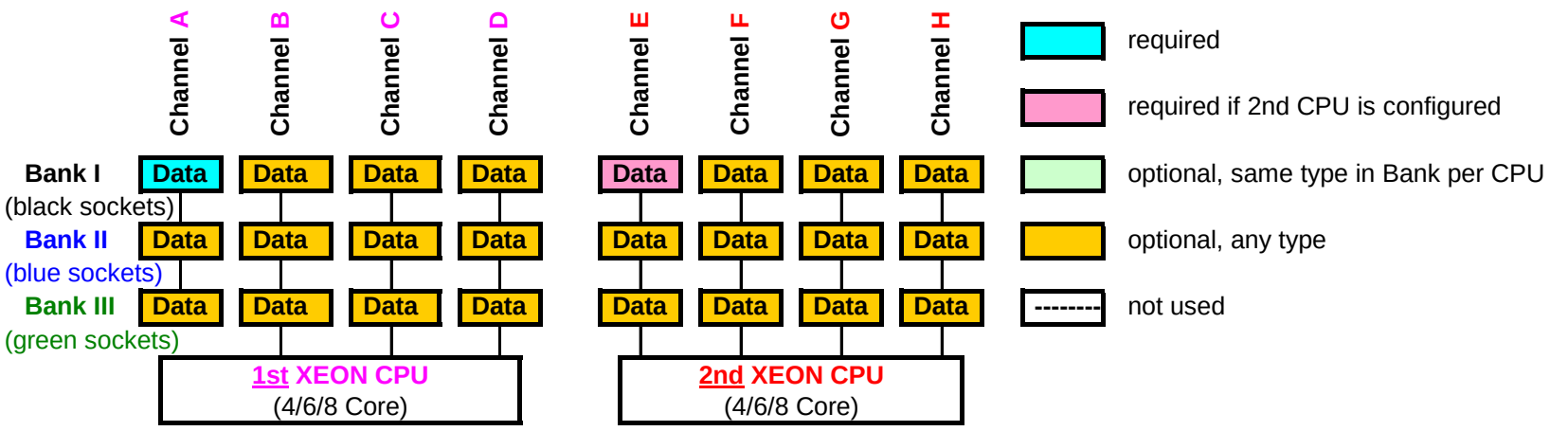
1DPC = 1 DIMM per Channel
2DPC = 2 DIMM per Channel
3DPC = 3 DIMM per Channel

Configuration hints:

- The memory sockets on the systemboard offer a color coding:
  Bank I black sockets
  Bank II blue sockets
  Bank III green sockets

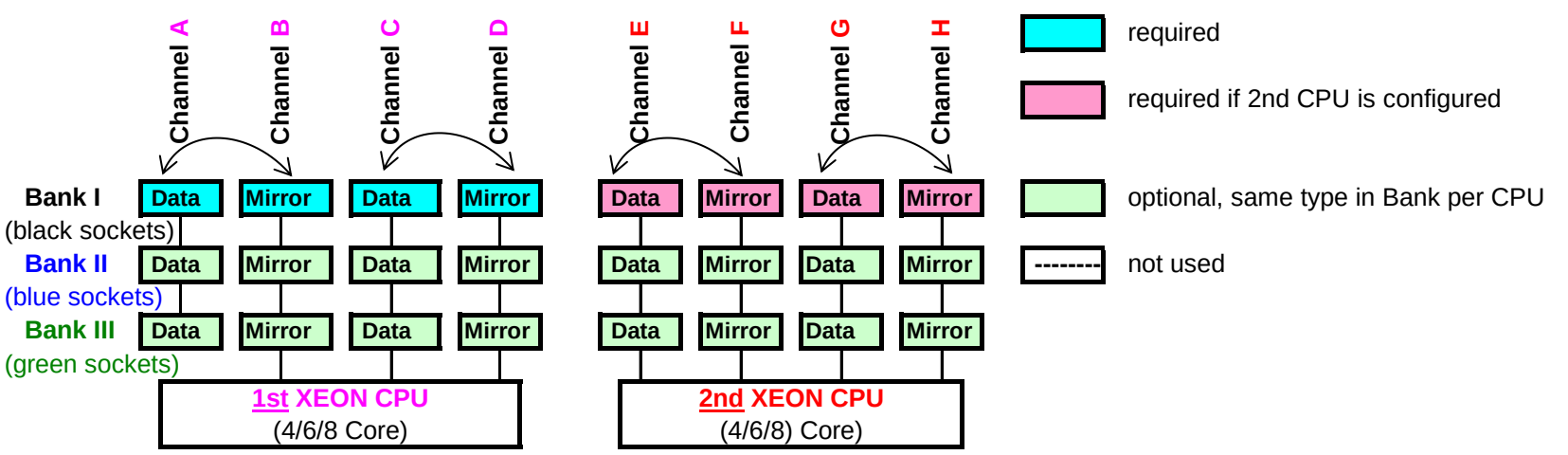
- A so called Bank consits of 1 memory module on every Channel available on one CPU (examples see below)
  Bank I on CPU 1/2 up to 4 memory modules connected to Channel A - H on the 1st/2nd CPU
  Bank II on CPU 1/2 up to 4 memory modules connected to Channel A - E on the 1st/2nd CPU
  Bank III on CPU 1/2 up to 4 memory modules connected to Channel A - E on the 1st/2nd CPU
  (can not be populated by UDIMM or 4R RDIMM memory modules)
- See below and next page for a detailed descriptions of the memory configuration supported.

1. Independent Channel Mode



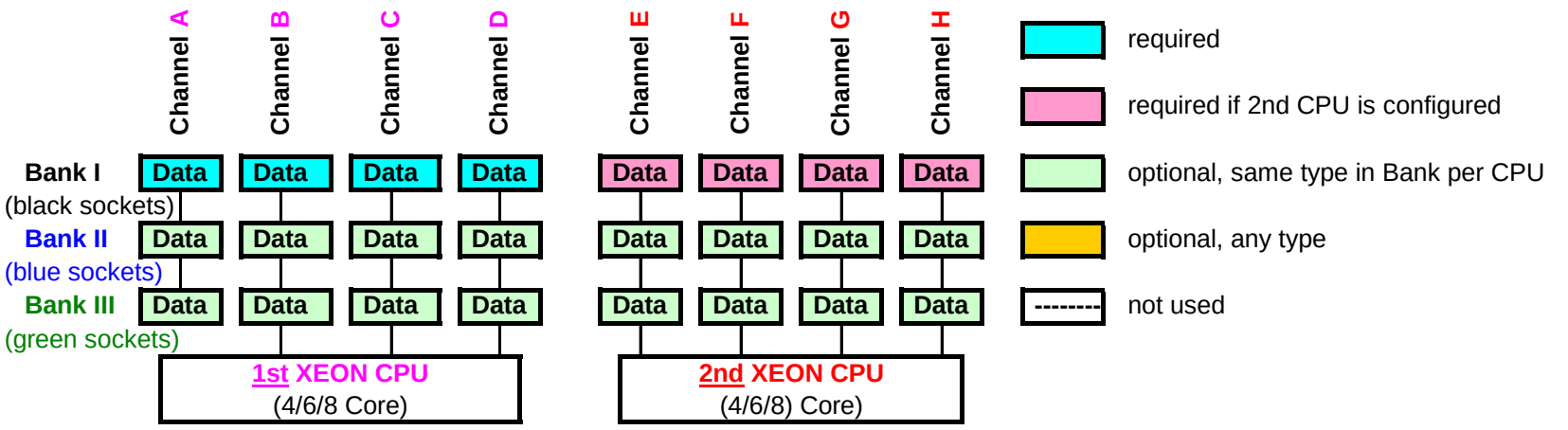
Independent Channel Mode allows all channels to be populated in any order
Can run with differently rated DIMMs and use the settings of the slowest DIMM installed in the system

2. Mirrored Channel Mode



Mirrored Channel Mode requires identical modules on channel A,B, C, D (1st CPU) or channel E, F, G and H (2nd CPU)
50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory
If this mode is used, a multiple of 4 identical modules has to be ordered.

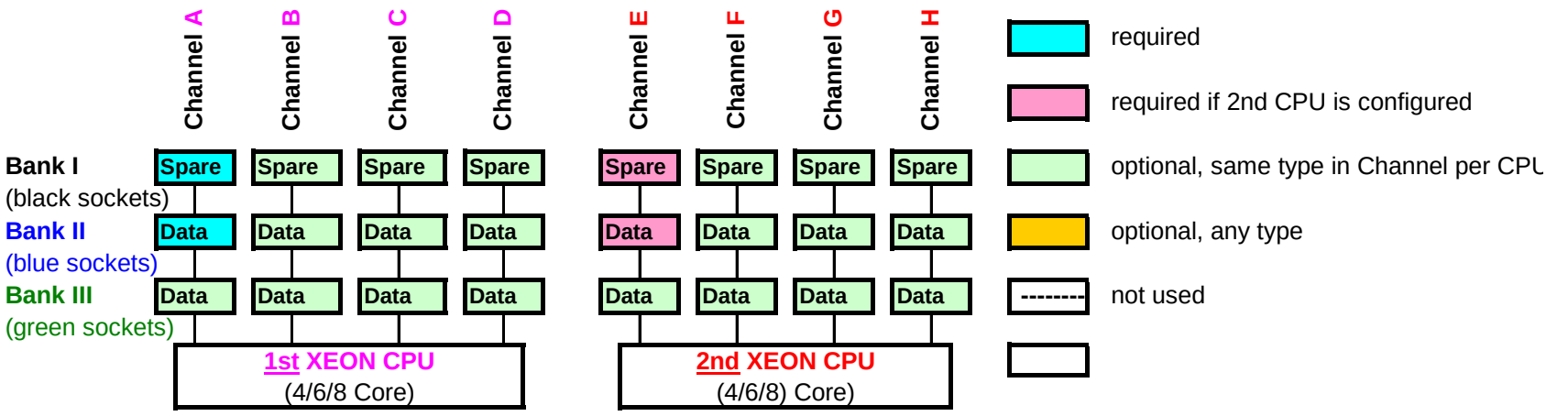
3. Performance Channel Mode



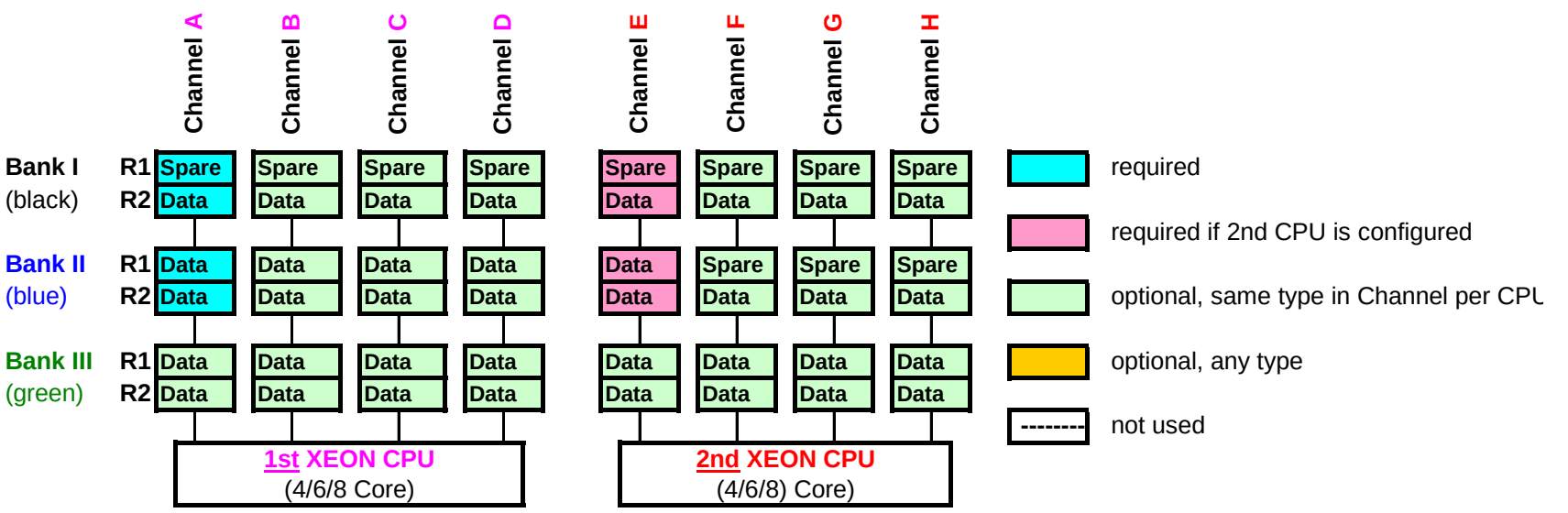
Performance Channel Mode requires identical modules on all channels of each Bank per CPU.
If this mode is used, a multiple of 4 identical modules has to be ordered.

4. Rank Sparing Mode

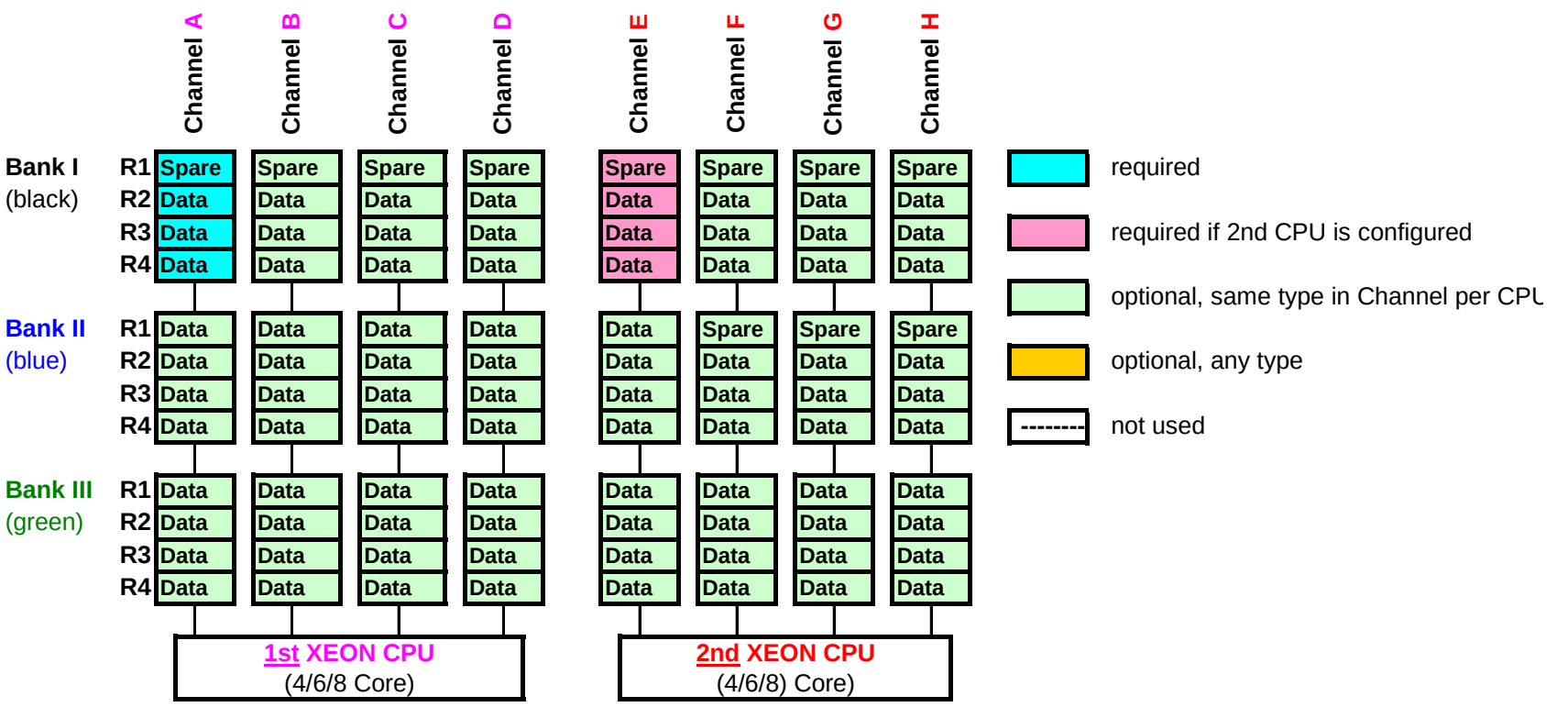
1-Rank Memory modules (RDIMM)



2-Rank Memory modules (RDIMM)



4-Rank Memory modules (LRDIMM)



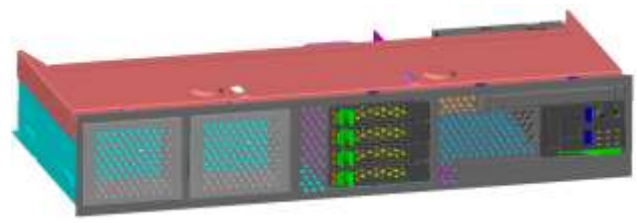
Rank Sparing Mode requires identical modules (same capacity and technology) within the same channel.
The available memory for applications will vary depending on configuration. Please refer to the spreadsheet above "Effective Memory capacity with active Rank Sparing Mode". Population rule for Rank sparing mode is to achieve max. available memory, e.g. 6 DIMMs will be spread across two channels, each with 3DPC

G

Section Va Possible configuration options for basic units

Config 1: 6x or 4x 3.5” HDD + 3.5" DDS/RDX drive

Is fixed due to selection of basic unit with:	
6x 3,5" HDD bays fixed	**S26361-K1373-V101**



Basic unit S26361-K1373-V401 with	**expandable**
Config 2: 4x 2.5” HDD	**S26361-F1373-E420**
Available Upgrade kits for this configuration option:	
Upgrade kit to 8x 2.5" HDD	**S26361-F1373-L424**
Upgrade kit to 12x 2.5" HDD	**S26361-F1373-L427**
Upgrade kit to 4x 2.5" HDD + LTO	**S26361-F1373-L423**

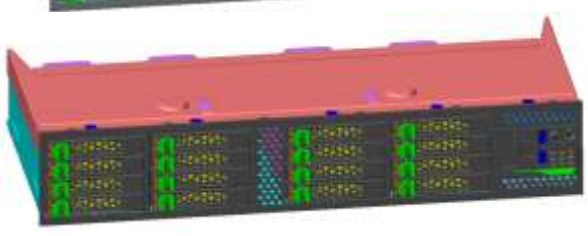
Basic unit S26361-K1373-V401 with	**expandable**
Config 3: 4x 2.5” HDD + LTO	**S26361-F1373-E430**
Available Upgrade kits for this configuration option:	
Upgrade kit to 8x 2.5" HDD	**S26361-F1373-L436**

Basic unit S26361-K1373-V201 with	
Config. 4: 8x 2,5" HDD bays fixed	**S26361-K1373-V201**
Available Upgrade kits for this fixed configuration:	
Upgrade kit to 12x 2.5" HDD	**S26361-F1373-L247**
Upgrade kit to 16x 2.5" HDD	**S26361-F1373-L248**

Basic unit S26361-K1373-V401 with	**expandable**
Config 5: 8x 2.5“ HDD + 3.5“ drive	**S26361-F1373-E450**
No Upgrade kit available!	

Basic unit S26361-K1373-V401 with	**expandable**
Config 6: 8x 2.5” HDD + LTO	**S26361-F1373-E460**
no ODD and LSD bay available!	
No Upgrade kit available!	

Basic unit S26361-K1373-V301 with	
Config 7: 12x 2,5" HDD bays fixed	**S26361-K1373-V301**
Available Upgrade kits for this fixed configuration:	
Upgrade kit to 16x 2.5" HDD	**S26361-F1373-L378**



Basic unit S26361-K1373-V401 with	**expandable**
Config 8: 16x 2.5” HDD	**S26361-F1373-E480**
no ODD and LSD bay available!	
No Upgrade kit available!	

Includes all necessary bezels, cages, backplanes and cables

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Section Vb Accessible drives

Setup RX300 S7 by ServerStart is supported with following configurations:
no DVD, no CD:
remote installation only (PXE service & DHCP server required)
built in CD/DVD or USB CD/DVD disk drive:
UNC Network share reachable or USB Floppy connected
USB Floppy, no CD/DVD:
USB CD/DVD connected

If installation is done locally, make sure you have external FDD available for driver installation.

Following USB Components are available	
1) USB DVD SM / Blu-Ray	
External SuperMulti Drive	S26341-F103-L126
External Blu-Ray Drive	S26341-F103-L127
2) USB Memorybird:	
MyUSBS A910 8GB, MLC Flash	S26391-F6048-L208
MyUSBS A910 16GB, MLC Flash	S26391-F6048-L216

1x

as soon as available

S26361-F3269-E2
DVD-RW supermulti slim SATA
all formats, DUAL/DL, DVD-RAM
0.5 x 5.25", black bezel
max. 1x per system

S26361-F3641-E2
Blu-ray Triple Writer slim SATA
6x BD-RW, 8x DVD, 24x CD
BD DL and all CD/DVD formats
0.5 x 5.25"
max. 1x per system

1x

S26361-F3324-E7
Tape drive DDS Gen5 USB 3.5"
36GB, 3MB/s, USB 2.0
1.6 x 3.5", black bezel
within a tape cage
incl. description (Ger/US)
cleaning cartridge
occupies 2 x 1" hard disk bays
max. 1x per system

S26361-F3857-E7
RDX drive USB 3.5" internal
80-320GB, 25MB/s, USB 2.0
1.6 x 3.5", black bezel
within a tape cage
incl. description (Ger/US)
without RDX cartridges
occupies 2 x 1" hard disk bays
max. 1x per system

Only for basic unit V1xx

1x

S26361-F3324-E5
Tape drive DDS Gen5 USB 3.5"
36GB, 3MB/s, USB 2.0
Connector: USB "B"
with USB cable
incl. description (Ger/US)
cleaning cartridge
1.6 x 3.5", black bezel
max. 1x per system

S26361-F3325-E2
Tape drive DDS Gen6 USB 3.5"
80GB, 6MB/s, USB 2.0
Connector: USB "B"
with USB cable
incl. cleaning cartridge
without data cartridge
1.6 * 3.5", black bezel
max. 1x per system

S26361-F3857-E5
RDX drive USB 3.5" internal
80-320GB, 25MB/s, USB 2.0
Connector: USB "B"
with USB cable
incl. description (Ger/US)
without RDX cartridges
1.6 x 3.5", black bezel
max. 1x per system

Only for basic unit V4xx

RDX cartridges must be ordered separately
RDX 160GB = S26361-F3857-L160
RDX 320GB = S26361-F3857-L320
RDX 500GB = S26361-F3857-L500
RDX 1TB = S26361-F3857-L600 *
10x RDX160 = S26361-F3857-L169
10x RDX320 = S26361-F3857-L329

* as soon as available

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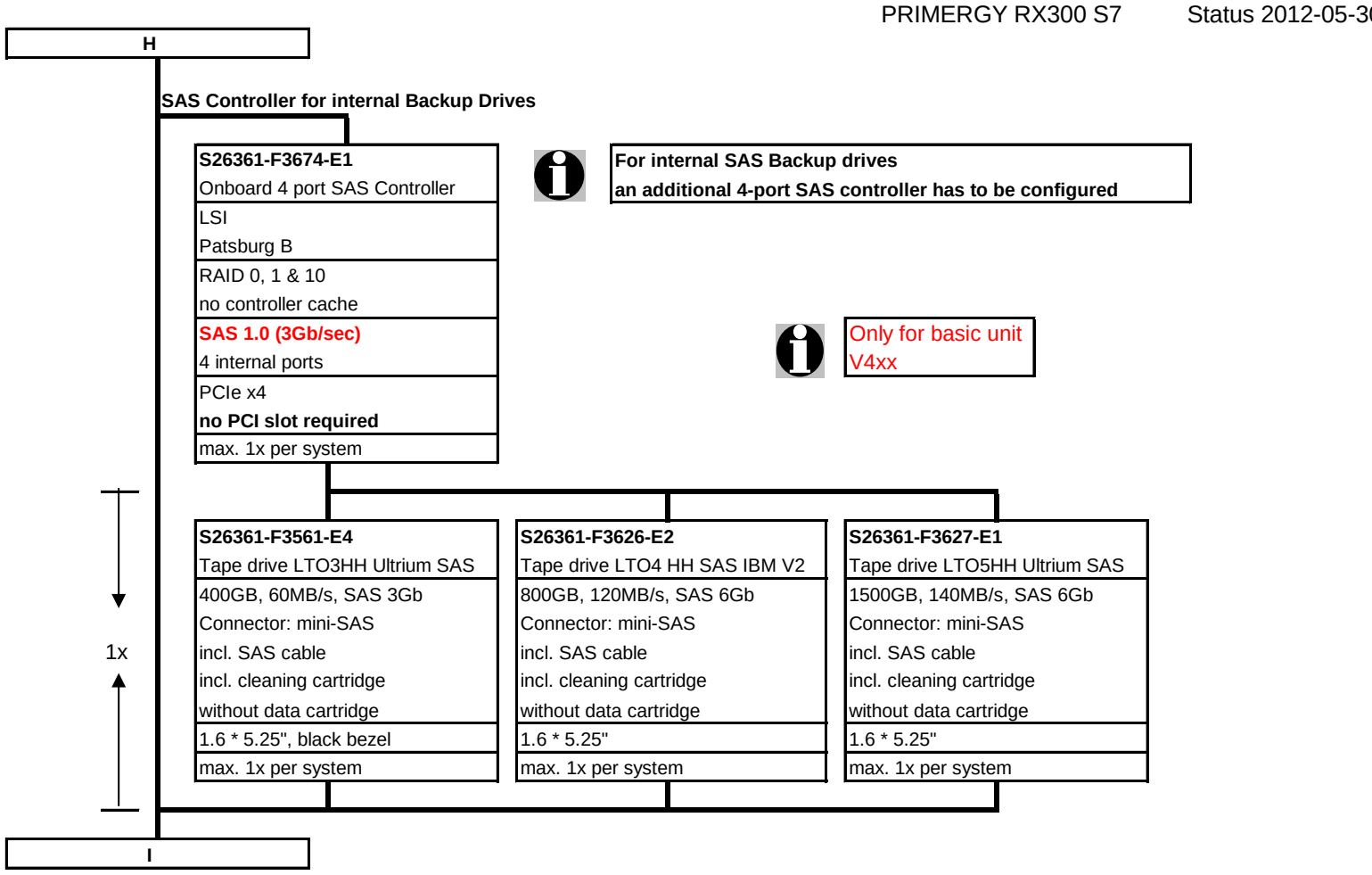
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SAS Controller for internal Backup Drives
S26361-F3674-E1
Onboard 4 port SAS Controller
LSI
Patsburg B
RAID 0, 1 & 10
no controller cache
SAS 1.0 (3Gb/sec)
4 internal ports
PCIe x4
no PCI slot required
max. 1x per system
For internal SAS Backup drives
an additional 4-port SAS controller has to be configured
Only for basic unit
V4xx
1x
S26361-F3561-E4
Tape drive LTO3HH Ultrium SAS
400GB, 60MB/s, SAS 3Gb
Connector: mini-SAS
incl. SAS cable
incl. cleaning cartridge
without data cartridge
1.6 * 5.25", black bezel
max. 1x per system
S26361-F3626-E2
Tape drive LTO4 HH SAS IBM V2
800GB, 120MB/s, SAS 6Gb
Connector: mini-SAS
incl. SAS cable
incl. cleaning cartridge
without data cartridge
1.6 * 5.25"
max. 1x per system
S26361-F3627-E1
Tape drive LTO5HH Ultrium SAS
1500GB, 140MB/s, SAS 6Gb
Connector: mini-SAS
incl. SAS cable
incl. cleaning cartridge
without data cartridge
1.6 * 5.25"
max. 1x per system
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Section VI Hard disks drives

Modular Raid controller is connected to internal HDDs
For basic units V1xx up to 6 SAS 3.5" hard disks can be configured also in mixed configuration.
If the option **"Tape drive"** is configured only 4 bays for hard disks are available
Mixed configurations with Eco SATA drives and SAS drives are not allowed
3.5" SAS drives and 3.5" BC SATA drives can be mixed, but not used in one logical RAID volume

6x / 4x with Backup drive for basic unit V1xx

S26361-F3700-E250 HD 250GB 7.2krpm 3.5" ECO 7200rpm,<9.0 ms, 8MB Cache **SATA 6Gb/s Economy** hot plug/hot replace tray max. 6x per system	**S26361-F3700-E500** HD 500GB 7.2krpm 3.5" ECO 7200rpm,<9.0 ms, 8MB Cache **SATA 6Gb/s Economy** hot plug/hot replace tray max. 6x per system	
S26361-F4005-E530 HD 300GB 15krpm 3.5" 15.000rpm,<4ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 6x per system	**S26361-F4005-E545** HD 450GB 15krpm 3.5" 15.000rpm,<4ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 6x per system	**S26361-F4005-E560** HD 600GB 15krpm 3.5" 15.000rpm,<4ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 6x per system
S26361-F3670-E500 HD 500GB 7.2krpm 3.5" 7200rpm,<9.0 ms, 64MB Cache **BC-SATA 6Gb/s** hot plug/hot replace tray max. 6x per system	**S26361-F3294-E200** HD 2000GB 7.2krpm 3.5" 7200rpm,<9.0 ms, 8MB Cache **BC-SATA 3Gb/s** hot plug/hot replace tray max. 6x per system	

as soon as available

S26361-F3670-E100 HD 1000GB 7.2krpm 3.5" 7200rpm,<9.0 ms, 64MB Cache **BC-SATA 6Gb/s** hot plug/hot replace tray max. 6x per system	**S26361-F3670-E200** HD 2000GB 7.2krpm 3.5" 7200rpm,<9.0 ms, 64MB Cache **BC-SATA 6Gb/s** hot plug/hot replace tray max. 6x per system	**S26361-F3670-E300** HD 3000GB 7.2krpm 3.5" 7200rpm,<9.0 ms, 64MB Cache **BC-SATA 6Gb/s** hot plug/hot replace tray max. 6x per system

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No mix of
2.5" BC-SATA HDD and
2.5" 10K SAS HDD

max 8x for V2xx,
12x for V3xx,
16x for V4xx

S26361-F4555-E100 SSD SATA 100GB, MLC Solid State Disk **SATA 3Gb/s** Mainstream Perfomance hot plug/hot replace tray max. 8/12/16x per system	**S26361-F4555-E200** SSD SATA 200GB, MLC Solid State Disk **SATA 3Gb/s** Mainstream Perfomance hot plug/hot replace tray max. 8/12/16x per system	**S26361-F4555-E400** SSD SATA 400GB, MLC Solid State Disk **SATA 3Gb/s** Mainstream Perfomance hot plug/hot replace tray max. 8/12/16x per system
S26361-F4541-E100 SSD 100GB **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system	**S26361-F4541-E200** SSD 200GB **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system	**S26361-F4541-E400** SSD 400GB **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system
S26361-F3708-E250 HD 250GB 7.2krpm 2.5" 7200rpm,<9,5ms, 64MB Cache **BC SATA 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system	**S26361-F3708-E500** HD 500GB 7.2krpm 2.5" 7200rpm,<9,5ms, 64MB Cache **BC SATA 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system	**S26361-F3708-E100** HD 1000GB 7.2krpm 2.5" 7200rpm,<9,5ms, 64MB Cache **BC SATA 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system
S26361-F4482-E573 HD 73GB 15krpm 2.5" 15000rpm,<4,5ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system	**S26361-F4482-E514** HD 146GB 15krpm 2.5" 15000rpm,<4,5ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system	**S26361-F4482-E530** HD 300GB 15krpm 2.5" 15000rpm,<4,5ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system
S26361-F4482-E190 HD 900GB 10krpm 2.5" 10000rpm,<4,5ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system		
S26361-F4482-E130 HD 300GB 10krpm 2.5" 10000rpm,<4,5ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system	**S26361-F4482-E145** HD 450GB 10krpm 2.5" 10000rpm,<4,5ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system	**S26361-F4482-E160** HD 600GB 10krpm 2.5" 10000rpm,<4,5ms, 8MB Cache **SAS 6Gb/s** hot plug/hot replace tray max. 8/12/16x per system

PCIe SSD (occupies PCIe slot), as soon as available

S26361-F4522-E781 PCIe-SSD 781GB MLC ioDrive2 781GB PCIe 2.0 PCIe x4, Low Profile max. 2 per system	**S26361-F4522-E121** PCIe-SSD 1,2TB MLC ioDrive2 1.2 TB PCIe 2.0 PCIe x4, Low Profile max. 2 per system

No mix of
781GB and 1.2TB SSD
possible

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Section VII Modular Raid 0/1, Raid5 for SAS or SATA HD`s. On-board Controller for max. 4x 2.5" SATA or SAS HD`s

On board SATA Controller with 3 Gb/sec and up to 4x 2.5" SATA HDDs (no additional controller required)
For up to 4x 2.5" SAS HDDs with RAID 0/1 functionality a Patsburg Upgrade Kit is required
For all other HDD configurations a modular RAID-controller is required

Following optional onboard SAS RAID can be selected for 4x2.5" HDDs or one SAS Tape device

S26361-F3674-E1
Onboard 4 port SAS Controller
LSI
Patsburg B
RAID 0, 1 & 10
no controller cache
SAS 1.0 (3Gb/sec)
4 internal ports
PCIe x4
no PCI slot required
max. 1x per system

For more than 4 hard disks or 6 Gb/sec one of the following modular RAID-controllers is required

Modular Raid 0/1 controller with IME support for SAS/SATA
This RAID controller supports max. 8 HDDs on internal SAS ports

Modular Raid 5 controller for SAS/SATA
RAID levels 0, 1, 10, 5, 50, 6 and 60 are supported.
This RAID controller supports max. 16 HDDs combined with internal SAS expander

The FBU is an option for the controller which can be used once per controller. If the FBU option has been choosen, the TFM Module is needed once per FBU.

as soon as available

S26361-F3554-E8
RAID Ctrl SAS 6G 8port internal
Based on chip LSISAS2008
LSI MegaRAID
no Cache, no BBU
RAID 0, 1 & 10
Support for 3Gb/s and 6Gb/s
SATA and SAS hard drives
PCIe x8
Low-profile MD2 form factor
max. 1x per system

S26361-F3554-E512
RAID Ctrl SAS 6G 8port internal
Based on chip LSISAS2108
LSI MegaRAID
512MB Cache with ECC
RAID 0, 1, 10, 5, 50, 6, 60
optional BBU
Support for 3Gb/s and 6Gb/s
SATA and SAS hard drives
PCIe x8
Low-profile MD2 form factor
max. 1x per system

S26361-F3669-E1
RAID Ctrl SAS 6G 8port internal
Based on chip LSISAS2208
LSI MegaRAID
1GB Cache with ECC
RAID 0, 1, 10, 5, 50, 6, 60
optional FBU
Support for 3Gb/s and 6Gb/s
SATA and SAS hard drives
PCIe x8
Low-profile MD2 form factor
max. 1x per system

S26361-F3257-E216
Cache Battery Backup Unit
with 16 cm cable set
max. 1x per Controller

1x

S26361-F3669-L660
RAID Key FastPath
License Activation Key
for 1 Controller

S26361-F3669-L661
RAID Key CacheCade
License Activation Key
for 1 Controller

Lose delivery FBU option

S26361-F3669-L100
TFM Module for FBU option
max. 1x per Controller

S26361-F3669-L110
Flash Backup Unit
with 25cm, 55cm, 70cm cable set
max. 1x per Controller

S26361-F3669-E100
TFM Module for FBU option
max. 1x per Controller

S26361-F3669-E125
Flash Backup Unit
with 25cm cable set
max. 1x per Controller

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SAS-/SCSI-/ Fibre-Channel Controller Low Profile

SAS controller for external backup drives

S26361-F3628-E201
SAS Controller 6Gb/s 8 port LP
LSI SAS9200-8e LP
PCIe 2.0 x4,
ext: 8 port
max. 3x per system

No mix and match of different FC or FCoE controllers possible.

All controllers for the connection of external storage system are delivered without cables. For the configuration of external cabling see the configurator for external storage system.

Fibre Channel Controller for external storage systems

S26361-F3631-E201	**S26361-F3631-E202**
8GBit/s FC Controller	8GBit/s FC Controller
Qlogic QLE2560, low profile bracket	Qlogic QLE2562, low profile bracket
1 channel 8GBit/sec FC Controller LC Interface for 50µm Fiber	2 channel 8GBit/sec FC Controller LC Interface for 50µm Fiber
PCIe x8, 170mm	PCIe x8, 170mm
max. 4x per system	max. 4x per system

For Fibre Channel SAN also other componets like switches, SFPs and optical wires are orderable (for details see price liste)

Loose Component: S26361-F3631-L201

Loose Component: S26361-F3631-L202

4x

S26361-F3961-E201	**S26361-F3961-E202**
8GBit/s FC Controller	8GBit/s FC Controller
Emulex LPe1250, low profile bracket	Emulex LPe12002, low profile bracket
1 channel 8GBit/sec FC Controller LC Interface for 50µm Fiber	2 channel 8GBit/sec FC Controller LC Interface for 50µm Fiber
PCIe x4, 170mm	PCIe x4, 170mm
max. 4x per system	max. 4x per system

Loose Component: S26361-F3961-L201

Loose Component: S26361-F3961-L202

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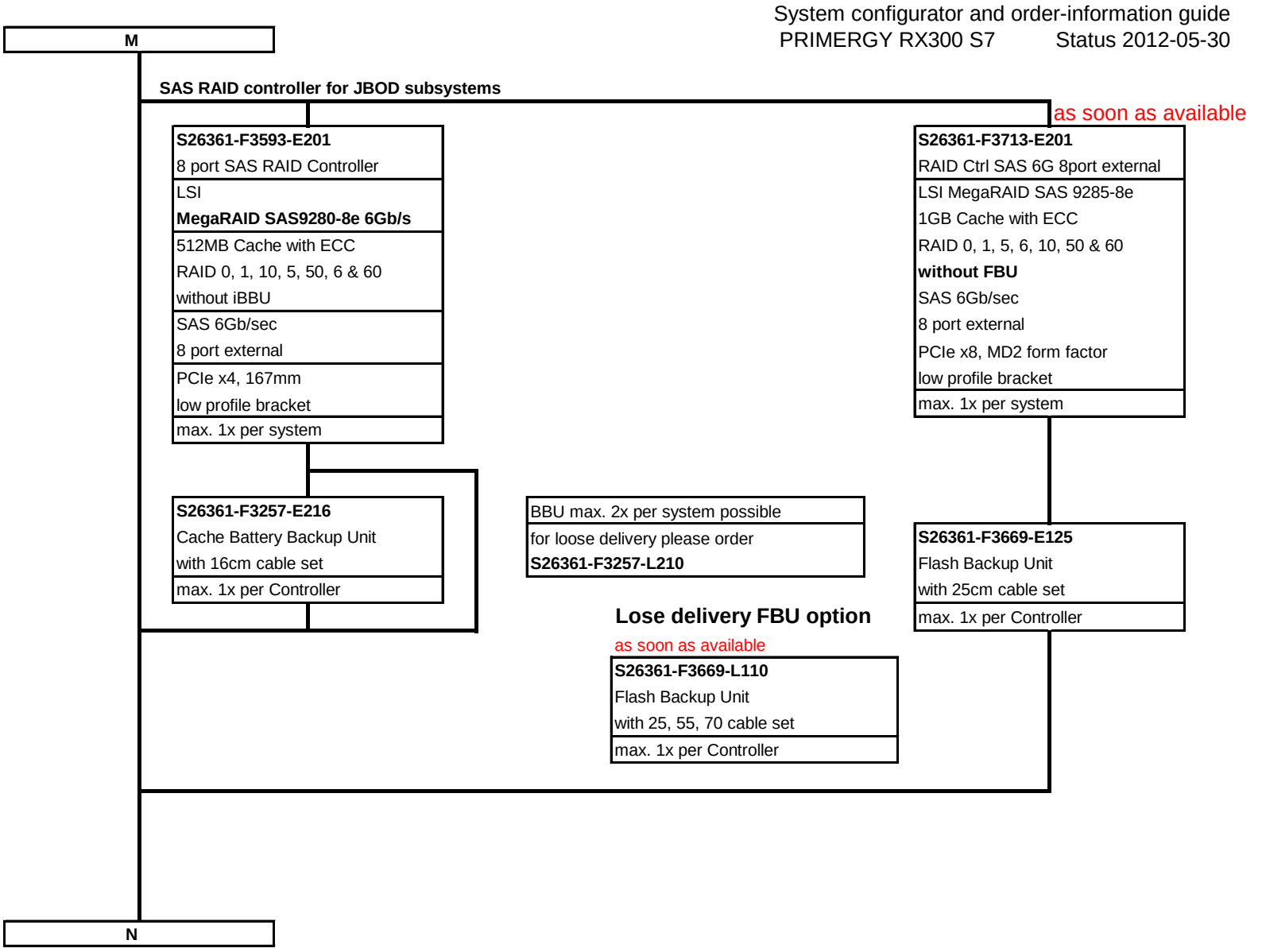
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SAS RAID controller for JBOD subsystems
as soon as available
S26361-F3593-E201
8 port SAS RAID Controller
LSI
MegaRAID SAS9280-8e 6Gb/s
512MB Cache with ECC
RAID 0, 1, 10, 5, 50, 6 & 60
without iBBU
SAS 6Gb/sec
8 port external
PCIe x4, 167mm
low profile bracket
max. 1x per system
S26361-F3713-E201
RAID Ctrl SAS 6G 8port external
LSI MegaRAID SAS 9285-8e
1GB Cache with ECC
RAID 0, 1, 5, 6, 10, 50 & 60
without FBU
SAS 6Gb/sec
8 port external
PCIe x8, MD2 form factor
low profile bracket
max. 1x per system
S26361-F3257-E216
Cache Battery Backup Unit
with 16cm cable set
max. 1x per Controller
BBU max. 2x per system possible
for loose delivery please order
S26361-F3257-L210
S26361-F3669-E125
Flash Backup Unit
with 25cm cable set
max. 1x per Controller
Lose delivery FBU option
as soon as available
S26361-F3669-L110
Flash Backup Unit
with 25, 55, 70 cable set
max. 1x per Controller
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Section VIII Communication / Network

2x Gigabit (Dualport) Ethernet Contr. onboard
Intel LAN I350 (Powerville)
ext: 2x RJ 45 connector

Modular On-Board LAN is a flexible extension of a cost-optimized Motherboard with basic 2x Gbit LAN on-board. 3 different Upgrade-Kits are offered, which consume a dedicated PCIe slot and can be ordered once per system. Every Upgrade-Kit is supported with special TP reduction

NEW) Modular On-Board LAN Adapter

S26361-F3610-E702
Upgrade-Kit to 4x Gbit LAN on-board
Eth Ctrl 2x1Gbit PCIe x4 D2735-2 Cu Intel Kawela based 2 port Server Adapter
PCIe x4, Low Profile ext: for RJ45-plug, Cat 5
max. 1x per system

S26361-F3611-E701
Upgrade-Kit to 6x Gbit LAN on-board
Eth Ctrl 4x1Gbit PCIe x4 D2745 Cu Intel Barton Hills based 4 Port Server Ad.
PCIe x4, low profile ext: for RJ45-plug, Cat 5
max. 1x per system

S26361-F3629-E702
Upgrade-Kit to 2xGbit+2x10Gbit LAN on-board
Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+ Intel Niantic based dual port 10Gb NIC
PCIe x8, Low Profile, Low Profile Bracket ext: 2x SFP+ cage
max. 1x per system

The 10Gb upgrade kit is delivered without SFP+ modules for optical cables, these must be ordered separately. Without SFP+ modules copper twinax cables are supported.

The SFP+ Module is also available as loose delivery
S26361-F3986-L3
Instead SFP+ Modules, SFP+ twinax cables from the switch vendors may be used

This is an option if Shared Management LAN over the 10Gb port is required instead Management LAN over 1Gb

S26361-F3986-E3
SFP+ Module MMF 10GbE LC
SFP+ module for 10 Gbit Ethernet FO cabling ext:LC-connector
max. 2x per adapter

S26361-F3629-E750
Shared 10Gb Management LAN
Install and configure Management LAN on 10Gb Shared LAN port
max. 1x per 10Gb upgrade kit

4x

A) 1-Port Copper PCIe Adapter 1000TX

S26361-F3516-E201 (Shelter Island)
Gigabit Ethernet Controller 1000TX LP
Eth Ctrl 1x1Gbit PCI-e Gigabit CT DT Cu LP Intel® Gigabit CT Desktop Adapter
PCIe x1 ext: for RJ45-connector, Cat 5
max. 4x per system

Loose delivery with:
S26361-F3516-L201

B) 1-Port MMF PCIe Adapter 1000SX

S26361-F3242-E201 (Sheepshead Bay)
Gigabit Ethernet Contr. 1000SX
Eth Ctrl 1x1Gbit PCI-e Pro/1000PF LC Intel PRO/1000 PF Server Adapter
PCIe x4 ext:LC-connector
max. 4x per system

C) 2-Port Copper PCIe Adapter 1000TX

S26361-F3610-E202 (D2735-2)
Gigabit Ethernet Controller Dual 1000TX LP
Eth Ctrl 2x1Gbit PCIe x4 D2735-2 Cu Intel Kawela based 2 port Server Adapter
PCIe x4, Low Profile ext: for RJ45-plug, Cat 5
max. 3x per system

Loose delivery with:
S26361-F3610-L502

D) 4-Port Copper PCIe Adapter 1000TX

S26361-F3611-E201 (D2745)
Gigabit Ethernet Controller Quad 1000TX LP
Eth Ctrl 4x1Gbit PCIe x4 D2745 Cu Intel Barton Hills based 4 Port Server Ad.
PCIe x4, low profile ext: for RJ45-plug, Cat 5
max. 3x per system

Loose delivery with:
S26361-F3611-L501

E) 10GbE 2-Port SFP+ for MMF Module

S26361-F3629-E202 (D2755)
10 Gigabit Ethernet Contr. dual port SFP+
Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+ Intel Niantic based dual port 10Gb NIC
PCIe x8, Low Profile, Low Profile Bracket ext: 2x SFP+ cage
max. 2x per system

The controller is delivered without SFP+ modules for optical cables, these must be ordered separately. Without SFP+ modules copper twinax cables are supported.

The adapter is also available as loose delivery with FH and LP bracket included: S26361-F3629-L502

S26361-F3986-E3
SFP+ Module MMF 10GbE LC
SFP+ module for 10 Gbit Ethernet FO cabling ext:LC-connector
max. 2x per adapter

The SFP+ Module is also available as loose delivery
S26361-F3986-L3
Instead SFP+ Modules, SFP+ twinax cables from the switch vendors may be used

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F) Fibre Channel over Ethernet

S26361-F3592-E202
10GBit/s CNA
Emulex
OCe10102
2 channel 10GBit/sec CNA
SFP+ Cage
PCIe x8, 170mm
max. 2 per system

Loose Delivery: S26361-F3592-L202

All controllers for the connection of external storage systems are delivered without cables.
For the configuration of external cabling see the configurator for external storage systems.

S26361-F3592-E108
SFP+ Module MMF 10GbE LC
SFP+ module for 10 Gbit
Ethernet FO cabling
ext:LC-connector
max. 2x per adapter

The SFP+ Module is also available as loose delivery
S26361-F3592-L108
Instead SFP+ Modules, SFP+ twinax cables from
the switch vendors may be used

G) Infiniband HCA's

2x

S26361-F4475-E102
IB HCA 40Gb 1 port QDR
IB HCA 1x 40Gb
PCIe 2.0 (5,0GT/s)
PCIe x8, low profile
ext: 1x QSFP-connector
max. 2x per system

loose delivery: S26361-F4475-L102

Low Profile PCIe form factor with exchangeable
Full Height (FH) or Low Profile (LP) bracket

S26361-F3996-E500
InfiniBand Cu Cable 40Gb
QSFP, customized length
max. 1x per adapter

If additional length of copper cable or optical cable are needed,
then they must be ordered from the cable vendor directly
Copper cable are also available for loose delivery as
S26361-F3996-L101, QSFP, 40Gb, 1m
S26361-F3996-L103, QSFP, 40Gb, 3m

S26361-F4475-E202
IB HCA 40Gb 2 port QDR
IB HCA 2x 40Gb
PCIe 2.0 (5,0GT/s)
PCIe x8, low profile
ext: 2x QSFP-connector
max. 2x per system

loose delivery: S26361-F4475-L202

Low Profile PCIe form factor with exchangeable
Full Height (FH) or Low Profile (LP) bracket

S26361-F3996-E500
InfiniBand Cu Cable 40Gb
QSFP, customized length
max. 1x per adapter

If additional length of copper cable or optical cable are needed,
then they must be ordered from the cable vendor directly
Copper cable are also available for loose delivery as
S26361-F3996-L101, QSFP, 40Gb, 1m
S26361-F3996-L103, QSFP, 40Gb, 3m

1x

S26361-F4533-E102/E202
IB HCA 56Gb 1 and 2 port FDR
IB HCA 2x 56Gb
PCIe 3.0 (5,0GT/s)
PCIe x16, low profile
ext: 2x QSFP-connector
max. 1x per system

loose delivery: S26361-F4533-L102/202

Low Profile PCIe form factor with exchangeable
Full Height (FH) or Low Profile (LP) bracket

No mix and match of different
IB HCA 40Gb and 56Gb possible.

S26361-F3996-E556
InfiniBand Cu Cable 56Gb
customized
QSFP, 1m and 3m
max. 2x per adapter

If additional length of copper cable or optical cable are needed,
then they must be ordered from the cable vendor directly
Copper cable are also available for loose delivery as
S26361-F3996-L561, QSFP, 56Gb, 1m
S26361-F3996-L563, QSFP, 56Gb, 3m

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Section IX System Management Products (RemoteView)

iRMC S3 (integrated Remote Management Controller) onboard server management
Controller with dedicated 10/100/1000 Service LAN-port and integrated graphics.
Optional 10/100 Service LAN-port on front panel.
The Service LAN-port can be switched alternatively on standard Gbit LAN port

S26361-F1790-E242
iRMC S3 advanced pack
integrated remote management controller
activation key for
graphical console redirection
and remote media redirection
max. 1x per system

S26361-F2557-E106
Local Service Display incl. mount. kit
Customer Self Service
LSD module incl. mounting kit
0.5" x 5.25"
max. 1x per system

S26361-F2571-E27
Maintenance LAN
Front management LAN Port
In combination with iRMC adv. pack
For local maintenance / console redirection,
Integrated in front (operating panel)
max. 1x per system

Section X Miscellaneous

Options and other peripherals
For other options, refer to SystemArchitect and Pricelist
These options are supplied lose with the shipment
For suitable peripherals for this product, please refer to SystemArcitect

Section XI Country specific power cord

S26361-F1452-E100
REGION KIT EMEA AP
For Shipments to EMEA / Asia and Pacific regions
1x per system

S26361-F1452-E110
REGION KIT JP
For Shipments to Japan regions
1x per system

Power cord has to be ordered separately

max. 2 x

Power cord options (1x per PSU)

T26139-Y1968-E100	Powercord for rack, 4m, grey, **IEC 320 C14 connector**
T26139-Y1742-E10	USA, Canada, 1.8m, grey
T26139-Y4024-E10	for -48V DC PSU only, 4m, black
T26139-Y3850-E10	Option "no powercord", for Countries without specific cable orderable like e.g. China

End PRIMERGY RX300 S7

Change Report

Date	Order number	Changes
2012-04-23	S26361-F3713-E201	new RAID Controller added
2012-04-20		Memory voltage / frequency spreadsheet, 3DPC at 1.5V only
2012-02-29		First Release